

REMARKS

Claims 1-3 and 6-52 are pending in the present application. In the above amendments, claims 1, 6, 33, 38, 41, 48, and 52 have been amended.

In the Office Action mailed August 06, 2004, the Examiner rejected claims 6 and 7 under 35 U.S.C. § 112, claims 48 and 49 under 35 U.S.C. § 102, and claims 1-2, 8-13, 33-35, 38-47, and 51-52 under 35 U.S.C. § 103.

Applicants respectfully respond to this Office Action.

Claim Rejections under 35 U.S.C. § 112

The Examiner rejected claims 6 and 7 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Accordingly, in order to overcome the rejection, claim 6 has been amended such that it now depends from claim 1. The rejection to claim 7 has become moot because claim 6 has been amended.

Claim Rejections under 35 U.S.C. § 102

The Examiner rejected claims 48 and 49 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,314,147 to Liang et al.

The rejection contends that Liang teaches an equalizer coupled to the one or more pre-processors and operative to receive, combine, and equalize the one or more streams of samples to generate symbol estimates. In order to overcome this rejection, claim 48 has been amended to emphasize that the equalizer includes a slicer coupled to the summer to receive and quantize the symbol estimates to generate sliced symbol estimates. This added feature is not described in Liang.

Consequently, the Liang Patent does not anticipate the structure defined in claim 48 of the present application under 35 U.S.C. § 102(e) for at least the foregoing reasons. Claim 49 is a claim dependent from claim 48 and therefore includes all the limitations of that independent claim. Since the Liang Patent does not render claims 48 and 49, as amended, unpatentable Applicants respectfully submit that the rejections thereof be withdrawn by the Examiner.

Claim Rejections under 35 U.S.C. § 103

Next, the Examiner rejected claims 1, 8-13, 33-35, 38-47, and 52 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,283,531 to Serizawa et al. in view of U.S. Patent No. 5,812,601 to Schramm. To establish a prima facie case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation of, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference(s) must teach or suggest all the claim limitations.

The rejection contends that Serizawa teaches equalizing the one or more streams of samples with an equalizer to generate symbol estimates. In order to overcome this rejection, claims 1 and 33 have been amended to emphasize that equalizing comprises quantizing the symbol estimates and claims 38, 41, and 52 have been amended to emphasize that the equalizer further comprises a slicer to receive and quantize the symbol estimates. These features are not described in Serizawa and Schramm.

Applicants thus respectfully submit that claims 1, 33, 38, 41, and 52 are not rendered obvious by the Serizawa Patent when considered alone or in combination with Schramm. Claims 8-13, 34-35, 39-40, and 42-47 depend from claims 1, 33, 38, and 41 and therefore include all the limitations of those independent claims. Since the Serizawa and Schramm Patents do not render claims 1, 8-13, 33-35, 38-47, and 52, as amended, unpatentable Applicants respectfully submit that the rejections thereof be withdrawn by the Examiner.

Finally, the Examiner rejected claims 2 and 51 under 35 U.S.C. § 103(a) as being unpatentable over Serizawa et al. in view of Schramm. As mentioned above, claim 1 has been amended to emphasize that equalizing comprises quantizing the symbol estimates and claim 38 has been amended to emphasize that the equalizer further comprises a slicer to receive, and quantize the symbol estimates. These features are not described in Serizawa and Schramm. Claims 2 and 51 depend from claims 1 and 38 and therefore include all the limitations of those independent claims. Since the Serizawa and Schramm Patents do not render claims 2 and 51

unpatentable Applicants respectfully submit that the rejections thereof be withdrawn by the Examiner.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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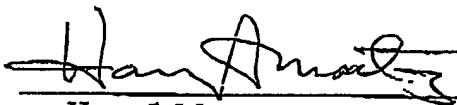
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Expires: May 5, 2005



Harry L. Moatz
Director of Enrollment and Discipline